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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/309,130 05/10/99 RAKAUSKAS

M 28572/32531A

IM22/1028
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EXAMINER

KRUER, K

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 10/28/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.
09/309,130

Applicant(s)
Rakauskas

Examiner
Kevin Kruer

Group Art Unit
1773



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 14 and 17-25 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 14 and 17-25 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 25 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "wood-like" is indefinite.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 14, 17-18, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's Admissions. Applicant admits that composite wood structures having an inner core substrate and veneer layer affixed to one or more major planer surfaces of the inner core substrate are well known in the art. Typically, woods used as veneers in the past have included ash, birch, cherry, maple, oak, pine, poplar, and walnut. Wood veneers may be secured to core substrates by lamination processes using rein binders in the form of rein-coated papers. Commonly used resins include thermosetting materials such as melamine/formaldehyde resins. A resin coated paper may be placed between a veneer sheet and an inner core substrate to form a layered, composite wood

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structure. This layered structure is then heated in a compression molding press at a temperature of 130C to 150C for 20-40 minutes. The initial heating causes the resin to melt and flow into the voids and pores of the core substrate and the veneer sheet. With a sufficiently long press cycle, the resin polymerizes and crosslinks into an intractable network structure (a thermoset) bonding the core substrate to the veneer. High density fiberboard may be utilized as the core substrate (see specification, page 1, line 13 through page 3, line 23).

The examiner takes the position that the method of making the laminate does not patentably distinguish the claimed article from the articles taught in the prior art.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admissions as applied to claims 14, 17-19, and 24 above, and further in view of Guyette (Pat. No. 5,425,986). Applicant's Admissions are relied upon as above.

Applicant does not admit that the resin coated paper sheet should have a basis weight of about 40 pounds per ream to about 100 pounds per ream. However, Guyette teaches a high pressure laminate comprising a fiberboard core, and intermediate resin impregnated paper sheet or lamina, and a decorative paper or lamina (abstract). Guyette teaches that the intermediate resin impregnated paper should comprise a kraft paper having a weight of 25 to about 400 grams per

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square meter (col 3, lines 53-58). It would have been obvious to one of ordinary skill in the art to utilize a kraft paper with a weight of 25-400 grams per square meter as the resin coated paper of the laminate admitted by Applicant, because Guyette teaches that kraft paper with such coating weights are desirably used as intermediate resin impregnated sheets in wood composite laminates.

Furthermore, Applicant does not admit that the resin should comprise about 45-65wt.% of the resin-saturated sheet. However, Guyette teaches that the resin in the resin impregnated intermediate sheet should comprise 5 to 75 percent by weight of the resin impregnated intermediate sheet. Therefore, it would have been obvious to one of ordinary skill in the art to utilize a resin-saturated sheet comprising 5-75wt.% resin because Guyette teaches that sheets comprising 5-75wt% resin are desirably utilized as intermediate layers in wood composite laminates.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admissions as applied to claims 14, 17-19, and 24 above, and further in view of Hartman et al. (Pat. No. 4,239,577). Applicant's admissions are relied upon as above. Applicant does not admit that the veneer should comprise from 7-10wt% water. However, Hartman teaches a wood laminate comprising a plurality of wood plies which are bonded together utilizing a thermosetting resin such as melamine-aldehyde. The laminate are pressurized and heated at conditions which are suitable for curing the melamine resin (col 4, lines 31-46). Hartman teaches that the outer veneer should comprise 7-25wt% water. Therefore, it would have been obvious to one of ordinary skill in the art to utilize an outer veneer with a water content of 7-25wt% because Hartman teaches that outer veneers which are heated and pressurized at conditions suitable for

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curing melamine resins should comprise 7-25wt% water. Veneers with such moisture contents have reduced wood failure rates (col 2, line 49).

8. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admissions as applied to claims 14, 17-19, and 24 above, and further in view of Brooker et al. (Pat. No. 5,723,221). Applicant's admissions are relied upon as above. Applicant does not admit that the resin should comprise about 98wt% melamine or that the resin may be a melamine/urea blend. However, Brooker teaches that it is well known in the art to utilize melamine aldehyde resins in both high and low pressure decorative laminates. To the melamine resin may be added a variety of fillers (col 2, lines 8+). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize a resin composition comprising 98wt% melamine and 2wt% other fillers. Furthermore, Brooker teaches that urea-formaldehyde may be advantageously added discreetly or in combination with the melamine resin (col 3, lines 3+). Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to blend urea and melamine resin in such a way as to advantageously effect the adhesion of the laminate.

Conclusion

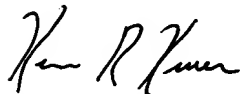
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. White et al. (Pat. No. 3,856,562) teaches that melamine and urea may be blended to increase adhesion of wood laminates.

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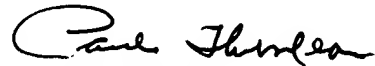
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is (703) 305-0025. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703)305-5436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0651.



Kevin R. Kruer
Patent Examiner



Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700